Comment GL14-87

Context-sensitive design is the FHWA policy committed to the advancement of context-sensitive solutions nationwide as one of the objectives of its Vital Few Goal on Environmental Stewardship and Streamlining. The objective is to improve the environmental quality of transportation decision making by incorporating context-sensitive solutions principles in all aspects of planning and the project development process. Context-sensitive solutions could mean adding color to concrete, incorporating design exceptions, or developing design modification to further reduce project effects as described in Common Responses – Almond Avenue Soundwall, Impacts to Businesses, and Replacement of Fairview Road Overcrossing/Truncation of Tolled Express Lanes. The coordination referenced is for project coordination within the project area. System coordination is completed at the system planning through route concepts. As a result of the project moving into the planning phase, Caltrans has already determined that the project concept is consistent with the planned I-405 concept both north and south of the project area.

Comment GL14-88

The Final EIR/EIS includes language related to coordination with the activities of the COG. There are no programmed projects for major freeway capacity enhancements along I-405 or I-605 in the area served by the COG.

Comment GL14-89

MIS Alternative 4 added one GP lane to I-405 and is included in the Draft EIR/EIS as Alternative 1. There is nothing in Renewed Measure M that either precludes or requires additional improvements beyond the single GP lane proposed in Alternative 1. OCTA has indicated that improvements to I-405, in addition to those identified in Alternative 1, would not be funded with Renewed Measure M revenues.

Comment GL14-90

With respect to Renewed Measure M and tolling, please see Common Response – Opposition to Tolling.

Comment GL14-91

The EIR/EIS is a joint document. With joint Caltrans NEPA/CEQA documents, as is the case with this EIR/EIS, the project purpose also is the objective. All of the specific noted absences (i.e., increase capacity, improve traffic and interchange operations, and enhance safety) are a subset of the more general purpose of the project provided below:

- Reduce congestion;
- Enhance operations;

- Increase mobility, improve trip reliability, maximize throughput, and optimize operations;
- Minimize environmental impacts and ROW acquisition; and
- Enhanced safety is not stated in the Purpose and Need statement.

Comment GL14-92

The difference in purpose and need between the NOI and NOP and the EIR/EIS is a result of more refined planning that took place after circulation of the NOI/NOP. There is no requirement that the purpose and need of the document must match exactly the purpose and need of the NOI and NOP.

Comment GL14-93

Please see Response to Comment GL14-91.

Comment GL14-94

All three of the build alternatives are viable alternatives, and they are discussed and analyzed in the Draft EIR/EIS. Only Alternative 2, based on Measure M and other project funding estimates, currently has a funding shortfall. All of the proposed alternatives could meet the referenced objective.

Please see Common Response – Measure M Funding.

Comment GL14-95

Consistent with Caltrans policy, the design concept, scope, and cost in the planning documents must be consistent with the proposed alternatives. Alternative 3 has the largest footprint, and components of Alternatives 1 and 2 are included within the general overall general concept, scope, and cost of Alternative 3. A modification to the project description does not mean predetermination or that the project description could not be changed. Based on some of the project modification in response to comments received during the public circulation period, the project description will require another modification prior to approval of the Final EIR/EIS and completion of the FHWA Project Level Air Quality Conformity Finding.

Please see Common Responses – Preferred Alternative Identification, Almond Avenue Soundwall, and Replacement of Fairview Road Overcrossing/Truncation of Tolled Express Lanes.

Comment GL14-96

Under CEQA and NEPA, only the formal environmental process may form the basis for the identification or rejection of alternatives. Previous planning efforts may not be substituted for the

formal environmental process. Similarly, previous planning efforts do not dictate the purpose and need of the project, although they may partially inform the effort to develop the purpose and need for the project. For these reasons, there is no strict continuity between previous efforts of the environmental process.

Comment GL14-97

SAFETEA-LU's 6002 requirements were met during the environmental process. The specifics of the coordination activities can be found in Chapter 5, Comments and Coordination. Please see Response to Comment GL14-91.

Comment GL14-98

Tolling and revenue generation in Alternative 3 is a way to address the purpose and need, such as maximizing throughput and providing a cost-effective early solution for delivery by using toll revenue to fund construction of the project. All of the build alternatives address aspects of the purpose of the project to greater or lesser degrees. The extent to which each alternative addresses the purpose of the project will be considered in identification of the Preferred Alternative. For information on the process that will be used to select the Preferred Alternatives, please see Common Response – Preferred Alternative Identification.

Comment GL14-99

The sentence in the Draft EIR/EIS referenced in the comment has been changed in the Final EIR/EIS to read: "None of the conceptual alternatives including fixed guideway or BRT in the median of the freeway were included in the final evaluation for the reasons cited in Section 2.2.7." Section 2.2.7 in Draft EIR/EIS identifies alternatives eliminated from further discussion and provides the reasons behind each elimination. The reasons presented in Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, of the Draft EIR/EIS, indicate that alternatives do not include funding as a reason for elimination from further consideration; high cost is cited in some cases, but in no case is it the only reason.

Comment GL14-100

Improving traffic flow is part of the purpose of the project. Improving traffic flow may be accomplished through many components of the purpose of the project, including reducing congestion, increasing mobility, maximizing throughput, and optimizing operations.

The proposed project is not a safety project.

The HOV lanes and the Express Lanes in all of the build alternatives are available for use by transit vehicles, and arterial improvements in the vicinity of I-405 will improve operations for buses traveling in mixed traffic flow.

All of the build alternatives provide pedestrian and bicycle facility improvements, as noted on page 3.1.6-103 of the Draft EIR/EIS. Additionally, TSM/TDM elements are included in each of the build alternatives, as stated on page 2-17 of the Draft EIR/EIS. The Draft EIR/EIS states in Section 2.2.3, TSM/TDM Alternative, that "TSM and TDM measures alone do not satisfy the purpose and need of the project…." However, because of their proven value, TSM/TDM components are included in all of the build alternatives.

Comment GL14-101

Alternatives with both LRT and BRT are included in the Draft EIR/EIS in Section 2.2.7, Alternatives Considered but Eliminated from Further Consideration. That section explains each of those alternatives and why they were eliminated. For a graphic summary of those alternatives, please see Figure 2-39 of the Draft EIR/EIS.

Additionally, demand management was included in the TSM/TDM Alternative included in the Draft EIR/EIS. The TSM/TDM Alternative does not meet the purpose and need of the project, as described in Section 2.2.4 of the Draft EIR/EIS. TSM/TDM elements are included in each of the build alternatives. As described in Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, of the Draft EIR/EIS, TSM and TDM components, including multimodal alternatives, were included and evaluated in various forms in the initial 13 MIS alternatives (see Section 2.2.4). All of the alternatives included park-and-ride facilities, as well as either enhanced local bus service, express bus service, or both. Although a TSM/TDM Alternative as an effective stand-alone alternative does not meet the project purpose, as explained in Draft EIR/EIS Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, the PDT identified the proposed TSM and TDM elements for the corridor. These elements would be implemented as part of the build alternatives, as described in Draft EIR/EIS Section 2.2.1, Common Design Features of the Build Alternatives.

While improvements to local roadways, street connections, and grade separations may generally improve traffic, current traffic congestion on I-405 is resulting in additional traffic on local streets as traffic avoids the congested freeway. The additional lanes and improved performance on I-405 under the build alternatives compared to the No Build Alternative will encourage traffic currently diverting from the congested freeway to local streets to remain on I-405.

Comment GL14-102

Multimodal transportation planning processes at both OCTA (see OCTA's 2006 Long Range Transportation Plan) and SCAG (see 2008 and 2012 RTPs) conclude with both plans and programs for the proposed project. Consideration of TSM/TDM and other modes for the I-405

corridor were considered and not found to meet the needs of the corridor. Please see also Response to Comment GL14-101.

Comment GL14-103

The project's purpose and need statement is broad enough to allow for the consideration of more than one type of solution, yet specific enough to allow for a range of alternatives to be studied and chosen from. Within the context of improving mobility and maximizing transportation system performance and accessibility, the project alternatives include improvements beyond freeway widening, including improvements to pedestrian and bike facilities, opportunities for improved transit service along the arterial streets improved in the vicinity of I-405 and along I-405 in the HOV and Express Lanes, as well as an opportunity in Alternative 3 to provide an element of traffic management along the mainline freeway corridor.

Comment GL14-104

As described in Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, the previously eliminated MIS alternatives were not considered viable options primarily because they did not fulfill the project purpose. The reasons presented in Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, of the Draft EIR/EIS indicate that alternatives do not include funding as a reason for elimination from further consideration; high cost is cited in some cases, but in no case is it the only reason.

Comment GL14-105

As described in Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, alternatives developed for the corridor have been removed from consideration because they do not meet the project purpose. These alternatives are not viable and are not fully analyzed in the EIR/EIS. This section explains each of those alternatives and why they were eliminated. In addition, please see Response to Comment GL14-104.

Comment GL14-106

As described in Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, alternatives developed for the corridor have been removed from consideration because they do not meet the project purpose. None of the build alternatives requires full acquisition of residential properties and, as a result of design modifications since release of the Draft EIR/EIS, no commercial properties are identified for full acquisition. Please see Common Response – Impacts to Businesses and Response to Comments GL14-104 and GL14-105.

Comment GL14-107

The referenced eliminated MIS alternatives would require full acquisitions of properties that would require displacement of homes and relocation of residences. The proposed project would only require partial acquisitions of residential properties, but it would not require full acquisition of any residential properties; therefore, no displacement of homes or relocation of residences is anticipated.

Comment GL14-108

All reported ROW information presented in the EIR/EIS is considered preliminary based on the best available information. Final ROW requirements cannot be determined until the next phase of the project and are subject to change. Section 3.1.4.2, Relocations and Real Property Acquisitions, of the Draft EIR/EIS, addresses impacts to the communities as a result of required ROW acquisitions and project construction activities. Appendix T will be added to the Final EIR/EIS. The information in Appendix T will identify all properties that would be affected by full and partial acquisitions and TCEs for the Preferred Alternative.

Comment GL14-109

The referenced discrepancies are for parcels that would directly be affected by full or partial acquisition. The difference in the parcel acquisitions between the Community Impact Assessment and Draft EIR/EIS are associated with continued efforts to minimize project ROW effects. Information that will be provided in Appendix T, as discussed in Response to Comment GL14-108, as well as the information in Section 3.1.4.2 of the Final EIR/EIS, will be updated during preparation of the Final EIR/EIS. Please see Response to Comment GL14-108.

Comment GL14-110

The EIR demonstrates that all significant environmental impacts of the proposed project were adequately investigated and discussed. Please see Common Response – Insufficient Environmental Document/Mitigation Measures.

Comment GL14-111

The commenter is comparing two completely different scenarios. The first scenario is subsequent to construction, and the second scenario is during construction.

Comment GL14-112

As described in the Draft EIR/EIS, access to businesses will be maintained at all times. Caltrans does agree that there are many “other” businesses located within the project corridor; however, the traffic volumes and number of trips to these other business are much smaller and do not require ramp closure restrictions to prevent substantial delay because of diverted traffic.

Comment GL14-113

The arterial street system is robust in that it is a grid that provides redundant paths to any location in the corridor, which provides multiple potential detours when needed. Detours will be more fully detailed to minimize congestion during final design when the Final TMP is prepared in coordination with the municipalities whose roadways will be used for detours, as specified in Draft EIR/EIS Mitigation Measure LU-2.

Alternate routes and detours will be finalized in the Final TMP to be prepared during the final design phase. Physical modifications of local streets and signal improvements, where required, will be implemented to support the detoured traffic on the local street network. Potential environmental effects of these actions will be examined as required by CEQA (addendum or supplemental or subsequent EIR) and NEPA (re-evaluation), if necessary.

Comment GL14-114

The environmental document, more specifically the alternatives analysis, complies with NEPA and CEQA requirements. Please see Common Response – Insufficient Environmental Document/Mitigation Measures.

Comment GL14-115

The Draft EIR/EIS provides a reasonable range of alternatives, as described in Section 2.2, Project Alternatives. Although the three build alternatives have numerous common design features, each build alternative is a stand-alone alternative and has unique features, as described in Section 2.2.2, Unique Features of the Build Alternatives.

Comment GL14-116

Please see Response to Comment GL14-115.

Comment GL14-117

As explained in the Draft EIR/EIS Traffic Study, a single demand forecast was used to identify traffic volumes to be used for operations analysis in the corridor under all of the alternatives. This represents a worst case within the project limits and enables an identification of the extent to which the proposed alternatives would not satisfy demand in the corridor. Page 3.1.6-39 of the Draft EIR/EIS explains that there is very little variation on the local streets in the vicinity of interchanges among the alternatives. This clearly indicates that there is very little in the way of unique travel patterns associated with the three build alternatives.

Comment GL14-118

Under CEQA and NEPA, only the formal environmental process may form the basis for the identification of the Preferred Alternative. Previous planning efforts may not be substituted for

the formal environmental process. Previous planning efforts may not dictate the Preferred Alternative, but they help to inform the next required environmental stage. For these reasons, the identification of a locally preferred strategy in the MIS is not the identification of the Preferred Alternative in the environmental process. For more information regarding identification of the Preferred Alternative, please see Common Response – Preferred Alternative Identification.

The language of Renewed Measure M does not preclude additional improvements beyond the single GP lane proposed in Alternative 1. Alternatives 2 and 3 are considered in the Draft EIR/EIS because they are reasonable alternatives anticipated to reduce congestion in the I-405 corridor. In identification of the Preferred Alternative, Caltrans and OCTA considered operation and safety benefits of each build alternative against the potential environmental effects. Identification of the Preferred Alternative represents a balance of the reasons in support of and in opposition of each alternative. It should be noted that OCTA has indicated that improvements to I-405, in addition to those identified in Alternative 1, would not be funded with Renewed Measure M.

Comment GL14-119

The Draft EIR/EIS fully explains in Section 2.1.1 the planning process prior to the environmental process, including the alternatives considered during the planning process. It is accurate that MIS Alternative 4 is not identical in every respect to Alternative 1 in the Draft EIR/EIS, but its basic characteristic of adding a single GP lane in each direction is the same. Subsequent to the MIS, a Project Study Report (Project Development Support) (PSR[PDS]) was developed that more fully defined MIS Alternative 4, which was subsequently more fully defined as Alternative 1 in the Draft EIR/EIS. The level of design detail increased at every step of the process, and the design was not static during these processes.

A change in cost from a previous planning study does not constitute an environmental impact and is consequently not covered in the Draft EIR/EIS.

Comment GL14-120

Construction of Alternative 1 (add one GP lane) as an interim project with subsequent expansion to Alternative 2 (add two GP lanes) would not provide appreciable benefits, but it would result in a substantial increase in environmental impacts and construction costs. Construction of Alternative 1, with subsequent expansion, would mean two separate occurrences of construction impacts and traffic disruption along the I-405 corridor. Even if shoulders are allowed to be converted to traveled lanes, there would still be a substantial amount of work and impacts to expand the freeway to Alternative 2, such as upgrading the shoulder pavement to support traffic load, reconstructing the interchange ramps to connect with the new outside lane, modifying

drainage facilities that are commonly placed along the edge of shoulder, relocating/providing new overhead signs, and updating/relocating ramp meter and ITS features. TCEs and additional ROW would also be necessary to gain construction access and construct the added lane in the future.

Conversion of continuous paved shoulder to a traveled way is not a Caltrans policy and is only used in the utmost restrictive conditions, such as Interstate 5 (I-5). Shoulders are essential to freeway facilities, especially a high-speed and high-volume facility such as I-405, to provide refuge for maintenance operations, breakdown vehicles, CHP enforcement stop, and emergency responses. Shoulders also provide lateral support for traveled way pavement and facility drainage runoff to inlets typically located along the edge of shoulders.

Comment GL14-121

The Preferred Alternative, once published in the Final EIR/EIS and approved in the Notice of Determination (NOD)/Record of Decision (ROD), is the only alternative with environmental approval for construction. Any substantial deviation from that alternative would require additional environmental approvals.

MAP-21 generally precludes the redesignation of a free GP lane as an HOT lane. Subject to certain limitations, HOV lanes may be converted to HOT lanes.

Comment GL14-122

The limits of each alternative are described with bulleted post miles in Section 2.2 of the Draft EIR/EIS. Appendix P of the Draft EIR/EIS provides the project layout plans for each build alternative, which clearly show the proposed limits of each build alternative.

Comment GL14-123

The contractual delivery method of constructing and operating the project would not result in an environmental impact and is consequently not covered in the Draft EIR/EIS.

Comment GL14-124

Regardless of the contractual delivery method of constructing and operating the project, all mitigations identified in the Final EIR/EIS must be implemented.

Comment GL14-125

The contractual delivery method of constructing the project would not result in an environmental impact and is consequently not covered in the Draft EIR/EIS.

Comment GL14-126

Legislative authority to implement Alternative 3 using a design-build procurement method and toll the Express Lanes already exists.

Comment GL14-127

The project does not include concessions or subsidy programs for low-income or other disadvantaged individuals for use of the tolled Express Lane facility. It is a choice to use the tolled Express Lane facility, and the GP lanes remain available for all users unable or unwilling to pay the toll for the Express Lane facility.

Comment GL14-128

As described in Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, Alternative 4 has been removed from consideration because it does not meet the project purpose as summarized in the Draft EIR/EIS on page 2-37. All elements of Alternative 4 are included in Alternatives 1, 2, and 3.

Comment GL14-129

The word "may" in the second bullet on page 2-17 of the Draft EIR/EIS has been replaced by the word "will" in the Final EIR/EIS.

Comment GL14-130

Caltrans, as assigned by FHWA, has prepared this joint Draft EIR/EIS, in compliance with both CEQA and NEPA. Please see Common Response – Insufficient Environmental Document/ Mitigation Measures.

Comment GL14-131

The environmental effects of the No Build Alternative are adequately disclosed in the Environmental Consequences sections within Chapter 3 of the Draft EIR/EIS. Please see Common Response – Insufficient Environmental Document/Mitigation Measures.

Comment GL14-132

At this time, there are no other projects planned or proposed within the corridor that have not already been incorporated into the proposed project; therefore, it is reasonable to expect that motorists will divert from the congested freeway under the No Build Alternative and use local streets.

Comment GL14-133

The costs of the alternatives are included in the Draft EIR/EIS and are not reported to be $5.8 billion. Please see Response to Comment GL14-132 and Common Response – Measure M Funding.

Comment GL14-134

The WCC Project is included in the No Build Alternative. The No Build Alternative, by definition, does not include elements that are in the proposed alternatives, including those elements that could be provided for the funds identified in the Measure M Extension. Elements funded by the Measure M Extension are included in the build alternatives. Please see Common Response – Measure M Funding.

Comment GL14-135

The No Build Alternative, as described in the Draft EIR/EIS, meets the applicable NEPA and CEQA requirements.

Please see Common Response – Insufficient Environmental Document/Mitigation Measures.

Comment GL14-136

Whether the performance standard by which Caltrans judges projects to have met their purpose and need at the time of opening to traffic does not preclude the adoption of an appropriate purpose and need, the performance of it may be difficult for Caltrans to measure.

Comment GL14-137

The purpose and need, which is provided in Final EIR/EIS Section 1.2, Project Purpose and Need, constitutes an "approved" purpose and need. The purpose and need statement is developed by the PDT; however, Caltrans, as the lead agency under both NEPA and CEQA, is ultimately responsible for approval of the purpose and need as part of the approval of the Final EIR/EIS. See also Response to Comment 13-136.

Comment GL14-138

All of the build alternatives are anticipated to reduce congestion in the I-405 corridor; none are expected to eliminate congestion in the corridor. The data table demonstrates the level of congestion reduction for each alternative. The terms are used to qualitatively describe the information. Comparative data presented throughout the Draft EIR/EIS are summarized in Table S-1 of the Draft EIR/EIS. Additional data are presented throughout the Draft EIR/EIS, including numerous tables showing data for each of the alternatives by topic in Chapter 3 of the Draft EIR/EIS.

Comment GL14-139

In addition to speed and throughput, there are other measures available to compare the traffic characteristics of the alternatives. The Draft EIR/EIS provides tables throughout Section 3.1.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, that show LOS, vehicle density, V/C ratios, ADT, VMT, corridor travel time, vehicle hours of delay, vehicle storage, and queuing, as well as speed and throughput.

With respect to alternatives incorporating other modes, please see Response to Comment GL14-101.

Comment GL14-140

Throughput is not the sole metric available to compare the traffic characteristics of the alternatives. The Draft EIR/EIS provides tables throughout Section 3.1.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, and includes LOS, vehicle density, V/C ratios, ADT, VMT, corridor travel time, vehicle hours of delay, speed, vehicle storage, and queuing, as well as throughput.

Comment GL14-141

The focus of the Draft EIR/EIS is on environmental impacts; the Draft EIR/EIS is intended to disclose impacts of alternatives. The Draft EIR/EIS is part of the environmental process, not the transportation planning process. Person throughput was considered in the transportation planning process; for example, HOV lane daily person trips were considered in the MIS process and are documented in Table 4.1-1 and Section 4.1.3.2 of the *Interstate 405 Major Investment Study Initial Screening Report* (November 2004).

Comment GL14-142

The HOV occupancy requirement would be changed under Alternative 3, regarding the change in occupancy requirement to three persons per vehicle. The alternatives will be measured against the project Purpose and Need, of which Statewide Objective 2.4 is not included. Please see Common Response – Opposition to Tolling.

Comment GL14-143

No policy changes related to use of the HOV lanes in Alternative 2 by low-emission or energy-efficient vehicles are identified in the Draft EIR/EIS for inclusion in the proposed project.

Comment GL14-144

The Draft EIR/EIS states on page 3.1.6-82 “An HOV3+ occupancy policy change was not considered, based solely for the 12 miles of I-405 from Euclid Street to I-605 along which Alternative 1 proposes improvements.” HOV occupancy requirements could reasonably be

adopted for a much larger geography covering the entire county or southern California region, but this I-405 project is more limited. The Draft EIR/EIS states on page 3.1.6-93 "The same options concerning HOV eligibility … discussed for Alternative 1 pertain to Alternative 2."

Comment GL14-145

Please see Response to Comment GL14-144.

Comment GL14-146

The requirements referenced in the comment do not apply to the existing condition, so no discussion of them is necessary in the Draft EIR/EIS. Pages 2-18 through 2-22 of the Draft EIR/EIS provide the operational policies that will ensure compliance with the conditions specified in the comment.

Comment GL14-147

If the Preferred Alternative is Alternative 3, the OCTA Board would adopt a policy regarding the use of net revenues. Those excess toll revenues (i.e., net revenues after all operating, capital, debt service, and other expenditures) from the Express Lanes in Alternative 3 would be available for OCTA to expend on transportation improvements in the I-405 corridor consistent with the provisions of the California Streets and Highways Code Section 143 (j)(1). This policy would be available on the OCTA Web site www.octa.net. A public-private partnership (P3) is one potential financing and delivery mechanism for the project; funding, finance, and delivery methods do not in and of themselves have environmental impacts. Delivery of the project through a P3 agreement in and of itself does not change the potential environmental impacts of the project; therefore, it is not a subject of the Draft EIR/EIS. OCTA has made no decisions regarding whether the project will be a P3 project.

Comment GL14-148

The contractual delivery method of constructing and operating the project would not result in an environmental impact and is consequently not covered in the Draft EIR/EIS. There is no plan that includes conveyance of all toll revenues to a private concessionaire, so the question regarding availability of funds for TSM/TDM programs is not applicable. All mitigations identified in the Final EIR/EIS must be implemented as part of the project, regardless of disposition of the toll revenues.

A Phase II Traffic and Revenue Study was prepared to forecast the gross toll revenues. The revenues vary by year and by assumptions regarding the occupancy requirement for free use of the Express Lanes and the extent of intermediate access. The data have been presented to the

OCTA Board in open session and are available to the public. Net revenue information has also been presented.

General project funding information is included in the Draft EIR/EIS in Table 1-10; however, project funding does not change the potential environmental impacts of the project and is not a subject of analysis in the Draft EIR/EIS. An FP showing a fully funded Preferred Alternative is required before the Final EIR/EIS can be approved.

Comment GL14-149

As disclosed in Section 3.2.6.3 of the Draft EIR/EIS, at the time the Draft EIR/EIS was circulated to the public, the project description in the RTP/FTIP included a design concept and scope for Alternative 1; however, the design concept and scope for Alternatives 2 and 3, as described in Chapter 2, were substantially different from what was analyzed in the 2008 RTP. OCTA, not Caltrans, initiated the change in the project description shown in Attachment A of the comment letter. All alternatives were represented equally in the Draft EIR/EIS, and there is no proclivity toward any of the build alternatives. Alternatives 2 and 3 are required to go through the SCAG RTP and FTIP amendment process prior to being able to determine consistency with the plans; however, the regional operational emissions analysis was completed for all alternatives and would be less than the no-build conditions in years 2020 and 2040. The amendment process is required to be completed prior to approval of the Final EIR/EIS. The Preferred Alternative identified in the Final EIR/EIS is consistent with the description in the 2012 RTP and FTIP.

Comment GL14-150

The project is listed in both the RTP and FTIP amendment process, and the project description in the Final EIR/EIS is consistent with both plans. Based on the alternative that is identified as the Preferred Alternative, these plans may have to be amended prior to the Final EIR/EIS. If so, this information will be added to the Final EIR/EIS.

Comment GL14-151

A committed project is one that is fully programmed in the FTIP and has an approved environmental document. Once the Preferred Alternative is identified, the RTP and FTIP may need to be amended prior to the Final EIR/EIS. If so, this information will be added to the Final EIR/EIS.

Comment GL14-152

The proposed improvements in ORA030605 include the additional referenced projects ORA45, ORA151, and ORA120310 (see Appendix L, Project Layouts). All project effects of ORA030605 were considered and analyzed in the Draft EIR/EIS. The referenced projects do not

constitute fragmentation because they are independent projects. Implementation of ORA045 and ORA120310 would not obviate the need under the I-405 Improvement Project to replace the bridges that are the subject of ORA045 and ORA120310. ORA151 is a local arterial project south of the proposed I-405 widening and is neither a required predecessor of nor a necessary subsequent project.

Comment GL14-153

All applicable general plan goals, zoning designations, and agency plans applicable to the project corridor were included in the consistency analysis, with adopted local and regional plans included in Section 3.1.1 of the Final EIR/EIS. Caltrans stands by the consistency analysis.

Comment GL14-154

The Draft EIR/EIS includes a range of feasible alternatives and objective analysis of the potential environmental effects of the proposed action. Caltrans, as assigned by FHWA, has prepared this joint Draft EIR/EIS, in compliance with CEQA and NEPA. Please see Common Response – Insufficient Environmental Document/Mitigation Measures.

Comment GL14-155

Tiering was not applicable for this project. Tiering is utilized when construction is not anticipated for many years or there is a lack of funding for the EIS preparation, undue complexity of NEPA process for lengthy corridors, or lack of construction funding that would prevent studies from becoming outdated.

Comment GL14-156

The project is considered in the context of SCAG's subarea plans because the proposed improvement is consistent with the SCAG RTP, which shows continued population and employment in the area affecting corridor traffic (see Response to Comment GL14-49). The *Interstate 405 Major Investment Study Corridor Mobility Problem and Purpose and Need Statement* (Parsons, March 2004) provides extensive material for the project purpose and need, definition of general corridor travel by mode, and other foundational material. The *Interstate 405 Major Investment Study Initial Screening Report* (Parsons, November 2004) provides initial screening of alternatives and eliminates unreasonable alternatives. In short, the MIS fulfills many of the corridor and subarea study functions mentioned in the comment.

Comment GL14-157

The addition of capacity on I-405 will divert traffic to I-405, rather than away from it to other facilities. Consequently, potential traffic impacts would occur in the I-405 corridor rather than on distant corridors such as I-5.

Consistent with FHWA and Caltrans policy and guidance, for the purposes of NEPA compliance, the No Build Alternative, as discussed and analyzed within Chapter 3 of the Draft EIR/EIS, meets the requirements of the No Federal Action Alternative.

Measure M2 provides funding for four projects on I-5; however, there are no offsite improvements that could yield similar congestion-relief benefits compared to the proposed project. It should be noted that all freeways in Orange County are at or near capacity, and Caltrans/OCTA prioritize the projects based on Orange County transportation needs. Please also see Response to Comments GF2-7 and GF2-8.

Comment GL14-158

There are no plans on the immediate horizon to provide any additional capacity improvements to I-405 beyond those included in the proposed build alternatives. The Draft EIR/EIS inherently acknowledges that, while all of the build alternatives are anticipated to reduce congestion in the I-405 corridor, none are expected to eliminate congestion in the corridor; however, the project provides benefits to congestion in the corridor that vary among the build alternatives. The benefits to congestion of the build alternatives are summarized in the Draft EIR/EIS in Tables 3.1.6-4 through 3.1.6-8 and Tables 3.1.6-12 through 3.1.6-14.

Comment GL14-159

Conversion of continuous paved shoulder to a traveled way is not a Caltrans policy and is only used in the utmost restrictive conditions, such as I-5. Shoulders are essential to freeway facilities, especially a high-speed and high-volume facility such as I-405, to provide refuge for maintenance operations, breakdown vehicles, CHP enforcement stops, and emergency responses. Shoulders also provide lateral support for traveled way pavement and facility drainage runoff to inlets typically located along the edge of shoulders. None of the proposed I-405 designs include a 14-ft left shoulder.

Comment GL14-160

Although the *California HOV/Express Lane Business Plan* does not specifically mention Express Lanes on I-405 in Orange County, that document does note the degradation of the HOV lanes on I-405, as noted in the Draft EIR/EIS on page 1-9. That document does not limit the range of alternatives that could be considered in the I-405 corridor. Furthermore, as stated in the Draft EIR/EIS on page 3.1.6-96:

> The 2012 RTP "includes a regional Express Lane network that would build upon the success of the 91 Express Lanes in Orange County and two demonstration projects in Los

Angeles County planned for operation in late 2012." I-405 within the project limits is part of that network, which includes more than 250 miles of freeway in southern California.

Comment GL14-161

No one is obligated to use the Express Lanes in Alternative 3. Express Lanes provide an option for a reliable uncongested trip in exchange for payment of a toll.

Comment GL14-162

The proposed project satisfies the requirements for independent utility and logical termini. A transportation project is required by FHWA (23 CFR 771.111) to meet standards that establish a project's "independent utility" and "logical termini." Please see Final EIR/EIS Section 1.2.2.7, Independent Utility and Logical Termini, for definitions and specifications for each requirement, as well as an explanation of how the proposed I-405 Improvement Project meets those requirements.

Comment GL14-163

Please see Response to Comment GL14-162.

Comment GL14-164

The WCC Project is on SR-22; a section of SR-22 overlaps onto I-405 within the project area for both the WCC Project and the I-405 Improvement Project. Both projects satisfy the requirements for independent utility and logical termini.

Comment GL14-165

The requirement that the congestion management plan (CMP) contain TDM measures does not flow to each individual project. As noted in Response to Comment GL14-129, the TSM and TDM measures noted on page 2-17 of the Draft EIR/EIS will be part of all of the build alternatives. The Draft EIR/EIS states on pages 2-8 and 2-9 that transit vehicles would continue to be eligible to use the HOV lanes in Alternatives 1 and 2, respectively, and on page 2-19 that transit vehicles would use the Express Lanes in Alternative 3 toll free. Provision of any additional transit services is properly considered by OCTA's ongoing multimodal transportation planning efforts. Additionally, OCTA maintains an ongoing ridesharing program.

The locations of bicycle facilities included in the project are identified in the Draft EIR/EIS on page 3.1.6-103. Section 3.1.6 has been updated in the Final EIR/EIS to include a discussion on park-and-ride lots along the I-405 project corridor.

Comment GL14-166

Alternative 1 has no impact on Almond Avenue. Alternative 2 would narrow Almond Avenue in some locations but provide a sidewalk and parking on one side of the street in addition to two travel lanes. No permanent impact to a Class III bikeway or to pedestrians on Almond Avenue is anticipated under Alternative 2. Alternative 3 would narrow Almond Avenue in some locations but provide a sidewalk and parking on one side of the street in addition to two travel lanes. No permanent impact to a Class III bikeway or to pedestrians on Almond Avenue is anticipated under Alternative 3.

Comment GL14-167

Neither the I-10 (San Bernardino Freeway/El Monte Busway) HOT Lanes Project nor the I-110 (Harbor Freeway/Transitway) HOT Lanes Project are located along or adjacent to the I-405 corridor; therefore, they are not required to be included in the cumulative impacts analysis prepared for this project. The WCC Project is within the I-405 corridor and was included in the cumulative impacts analysis prepared for this project (please see Draft EIR/EIS Section 3.6, Cumulative Impacts).

Comment GL14-168

The WCC Project will be completed prior to any construction activity related to the I-405 Improvement Project; therefore, it is not included in the Draft EIR/EIS as a reasonably foreseeable project but as a project that will be completed. The analysis associated with the I-405 Improvement Project assumes completion and operation of the WCC Project. The WCC Project has been appropriately included in the technical analyses and the Draft EIR/EIS.

Comment GL14-169

The Draft EIR/EIS discloses potential impacts of the proposed project, not other projects or groups of other projects, except those projects that might be considered reasonably foreseeable. Reasonably foreseeable projects are identified and cumulative impacts analyzed in Section 3.6 of the Draft EIR/EIS.

Comment GL14-170

With respect to cumulative impacts, please see Response to Comment GL14-169.

Comment GL14-171

The Draft EIR/EIS assesses potential traffic impacts to the corridor of the proposed alternatives in Section 3.1.6. Behavioral changes referenced in the comment that might result from a more extensive implementation of Express Lanes and/or HOT lanes in southern California are more appropriately addressed through the regional transportation planning process.

Comment GL14-172

The goals and objectives of the OCTA 2010 Long Range Transportation Plan (LRTP) are broad in nature and are intended to apply to all projects listed in the LRTP. The I-405 Improvement Project's purpose and need is broad enough to allow for consideration of more than one solution but specific enough that the range of alternatives can be focused for the project. Nevertheless, although more specific, the I-405 Improvement Project purpose and need is consistent with the broad goals and objectives of the OCTA 2010 LRTP.

Comment GL14-173

No long-term lane closures on the I-405 mainline are anticipated as part of the construction process. Long-term closures of ramps and arterial overcrossings are identified in Section 3.1.4.1.3 of the Draft EIR/EIS. Detours for these closures are identified in Appendix M of the Draft EIR/EIS. The detours will be more fully evaluated to minimize congestion during final design when the Final TMP is prepared in coordination with the municipalities whose roadways will be used for detours, as specified in Draft EIR/EIS Mitigation Measure LU-2.

Comment GL14-174

With respect to Alternative 3, the anticipated traffic characteristics of transition areas at termination points of the Express Lanes are described on page 3.1.6-96 of the Draft EIR/EIS and are summarized in Table 3.1.6-17. With respect to a potential traffic bottleneck near the Los Angeles county line, please see Common Response – Traffic Flow at the Orange County/Los Angeles County Line.

Comment GL14-175

Caltrans, as assigned by FHWA, has prepared this joint Draft EIR/EIS in compliance with CEQA and NEPA.

Please also see Response to Comment GL14-4 and Common Response – Insufficient Environmental Document/Mitigation Measures.

Comment GL14-176

As stated in the Draft EIR/EIS, Caltrans is the lead agency for CEQA and NEPA and is responsible for the accuracy of the information within the EIR/EIS. OCTA is the sponsoring agency. Please also see Responses to Comments GL14-4 and GL14-175 and Common Response – Insufficient Environmental Document/Mitigation Measures.

Comment GL14-177

With respect to evidence in the Draft EIR/EIS regarding reductions in congestion anticipated as a result of the build alternatives, please see Response to Comment GL14-52.

Comment GL14-178

Table 3.1.1-1 is a table of other local and regional plans' goals, policies, or objectives. The document measures the project next to these goals, policies, or objectives. The proposed project is not a safety project. The text referenced in the comment with respect to potential accident reduction has been removed from the Final EIR/EIS.

Comment GL14-179

Contrary to the assertion of the comment, the proposed project does not induce travel, as explained in Response to Comment GL14-47. The emissions estimates included in the Draft EIR/EIS are accurate and based on the traffic forecasts.

Comment GL14-180

With respect to truck volumes, please see Response to Comment GL14-182.

Comment GL14-181

The percent of trucks forecast to use I-405 has not been misrepresented. The percent of trucks used in the analysis is based on the percent of trucks using I-405 within the project limits in 2009. The Caltrans Truck Count data between SR-73 and I-605 range from 3 to 3.49 percent in 2009 and 2010, indicating no upward or downward trend in truck percentages. The 4.45 percent referenced in the comment is for the segment of I-405 north of I-605 outside the project limits.

Comment GL14-182

It is assumed that the trucks to which the commenter is referring are tractor trailers. The Express Lanes proposed in Alternative 3 are considered HOV lanes, and trailers are not allowed in HOV lanes.

Comment GL14-183

The forecast volumes are in vehicles, not passenger car equivalent (PCE). The LOS analysis uses truck percentages to account for the differences in operating characteristics between passenger cars and trucks.

Comment GL14-184

The percentage of trucks within the project corridor is substantially lower than within the I-710 corridor. This is directly attributable to the fact that the I-710 corridor terminates at the Ports of Long Beach and Los Angeles, which are responsible for generating many truck trips to haul cargo out of the Ports. The annual average daily truck traffic is shown for identified locations on the State Highway System and can be found on the Caltrans Web site at http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/. Truck traffic is classified by the number of

axles. The 2-axle class includes 1-1/2-ton trucks with dual rear tires and excludes pickups and vans with only four tires. For the purposes of the EIR/EIS, total truck percentages were used, which includes 2 through 5+ axle trucks. Please also see Responses to Comments GL14-181 through GL14-183.

Comment GL14-185

In 1998, California identified diesel exhaust particulate matter as a TAC based on its potential to cause cancer, premature death, and other health problems. This assessment formed the basis for a decision by CARB to formally identify particles in diesel exhaust as a TAC that may pose a threat to human health. Diesel engines emit a complex mix of pollutants, the most visible of which are very small carbon particles or "soot," known as diesel particulate matter (DPM). Diesel exhaust also contains more than 40 cancer-causing substances, most of which are readily adsorbed on the soot particles. These include many known or suspected cancer-causing substances, such as benzene, arsenic, and formaldehyde. Overall, diesel engine emissions are responsible for most of California's estimated cancer risk attributable to air pollution. In addition, DPM is a significant fraction of California's particulate pollution problem. Assessments by CARB and EPA estimate that DPM annually contributes to approximately 3,500 premature respiratory and cardiovascular deaths and thousands of hospital admissions, asthma attacks, and other respiratory symptoms. CARB has found that DPM contributes more than 70 percent of the known risk from air toxics and poses the greatest cancer risks among all identified air toxics. Diesel trucks contribute more than half of the total diesel combustion sources; however, CARB has adopted a Diesel Risk Reduction Plan with control measures that would reduce the overall DPM emissions by approximately 85 percent from 2000 and 2020.

Based on FHWA guidance published September 30, 2009 (Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents), the basic procedure for analyzing emissions for on-road air toxics is to calculate emission factors using EMFAC2007 and apply the emission factors to speed and VMT data specific to the proposed project. EMFAC2007 is the emission inventory model developed by CARB, which calculates emission inventories for motor vehicles operating on roads in California. The emission factors used in this analysis are from EMFAC2007 and are specific to the Orange County portion of the basin. DPM emissions are shown in Tables 3.2.6-13 and 3.2.6-14 of the Draft EIR/EIS (pages 3.2.6-47 and 3.2.6-48). Emissions of air toxics will likely be lower than present levels in the design year as a result of EPA and California's control programs, which are projected to further reduce air toxic emissions.

With respect to the vehicle mix on I-405 compared to I-710, the truck percentage on I-710 near I-405 is approximately 12 percent, based on the Caltrans Truck Count data for 2009. The proximity of the Ports of Los Angeles and Long Beach are responsible for this high percentage.

Comment GL14-186

By providing free use of the Express Lanes in Alternative 3 to carpools, carpool formation is encouraged by pricing and reducing travel time. No quantification is available for the extent to which congestion pricing along the limited distance of the I-405 corridor would affect carpool formation.

Comment GL14-187

Please see Response to Comment GL14-47.

Comment GL14-188

Complete closure of the Fairview Road northbound off-ramp up to 30 days to accommodate project construction is no longer required. Alternative 3 has been revised to eliminate new lanes south of Euclid Street, except for extension of the southbound auxiliary lane to the Harbor Boulevard exit ramp, and signing/striping to transition between the existing HOV and proposed Tolled Express Lanes. Please see Common Response – Replacement of Fairview Road Overcrossing/Truncation of Tolled Express Lanes.

Long-term closures of ramps and arterial overcrossings are identified in Section 3.1.4.1.3 of the Draft EIR/EIS. Detours for these closures are identified in Appendix M of the Draft EIR/EIS. The detours will be more fully evaluated to minimize congestion during final design when the Final TMP is prepared in coordination with the municipalities whose roadways will be used for detours, as specified in Draft EIR/EIS Mitigation Measure LU-2.

Comment GL14-189

Temporary short- and long-term impacts on surrounding local streets and adjacent freeways due to traffic diversion and detours to avoid construction delay on I-405 will be addressed in the Final TMP to be prepared during the final design phase. The Final TMP will identify and require minimization of construction-related effects on surrounding streets and adjacent freeways by applying a variety of techniques, including public information, motorist information, incident management, construction strategies, demand management, and alternate route strategies.

No long-term lane closures on the I-405 mainline are anticipated as part of the construction process. Diversion due to construction on the I-405 mainline is anticipated to be minimal because no long-term lane closures are anticipated.

Comment GL14-190

All anticipated temporary impacts as a result of closures are discussed in detail beginning on page 3.1.4-22 in Section 3.1.4.1.3 of the Draft EIR/EIS. All anticipated alternate routes and detours are presented in the Ramp Closure Study (see Community Impact Assessment, Appendix

C). A Draft TMP, including traffic detour routes within the local arterial street network, is also included (see Appendix M, Proposed Ramp Closure Detour Routes).

Community disruption during project construction as a result of construction activities would be temporary and mitigated by implementing a traffic staging plan and a TMP as required by Measure T-1 (Draft EIR/EIS Section 3.1.6, Traffic and Transportation/Pedestrian and Bicycle Facilities), as well as the measures in Section 3.1.7, Visual/Aesthetics; Section 3.2.7, Noise; and Section 3.2.6, Air Quality. Additionally, Measures COM-1 through COM-12 are included to minimize project construction effects on neighborhood and community cohesion.

OCTA and Caltrans shall prepare a Final TMP to minimize direct and cumulative construction impacts on the community. Alternate routes and detours will be identified in the Final TMP to be prepared during the final design phase and prior to construction. At that time, physical modifications of local streets to support the detoured traffic, where applicable, will be examined for environmental effects as required by CEQA (addendum or supplemental or subsequent EIR) and NEPA (re-evaluation).

Comment GL14-191

The TMP will be finalized during the final design phase. The feasibility and final locations of street and ramp closures will be analyzed in more detail in the final TMP, including potential environmental effects. Caltrans/OCTA will make every effort to provide access to businesses during construction. A detailed stage construction plan will be developed during the construction phase of the project. The stage construction and detour plans will detail how access will be provided to each property and for how long, if at all, the access will be restricted. Measures COM-1 through COM-12 and T-1 are designed to minimize potential construction-related temporary effects to businesses. Additional measures may be implemented to minimize adverse effects on the community and businesses.

With respect to potential impacts of construction and detours, please see Response to Comment GL14-188.

Comment GL14-192

Local arterials anticipated for long-term closure lasting up to 12 months to facilitate construction of the overcrossing structures are identified in Section 3.1.4.1.3 of the Draft EIR/EIS.

Because of the cul-de-sacs served by Almond Avenue, Almond Avenue would remain open during construction. The potential for closures of Almond Avenue between cul-de-sacs (i.e., maintaining access to each cul-de-sac from at least one direction at all times) will be more fully considered during development of the construction plans and Final TMP. Such closures would

require detour plans prepared in coordination with the City of Seal Beach, whose roadways will be used for detours, as specified in Draft EIR/EIS Mitigation Measure LU-2. Every effort will be made to avoid any closure of Almond Avenue between cul-de-sacs.

Comment GL14-193

As described in the EIR/EIS, based on the short-term and temporary nature of the closures (i.e., 10 to 30 days), the increased travel times and distances would not result in a substantial economic effect on businesses. Although businesses may benefit from being next to the freeway, they are not dependent on access from I-405. All businesses accessible by temporarily closed ramps are also accessible by a local street network for patrons and residents to access all businesses within the project corridor. As described in Measure COM-2, "Business access will be maintained at all times during construction, consistent with Section 7-1.03 Public Convenience of Standard Specifications (2010)." As discussed in the Draft EIR/EIS, preliminary detours would take approximately 1.5 to 5.5 minutes to travel 0.75 to 1.75 miles. It is not anticipated that the increased travel time or distance would alter patron choice, and potential economic effects on businesses were not considered substantial.

Comment GL14-194

Please see Response to Comment GL14-193.

Comment GL14-195

Alternate routes and detours will be identified in the TMP to be prepared during the final design phase. Physical modifications of local streets to support the detoured traffic, where applicable, will be examined for environmental effects as required by CEQA (addendum or supplemental or subsequent EIR) and NEPA (re-evaluation).

Comment GL14-196

Each overcrossing structure replacement is anticipated to require 8 to 12 months of construction if constructed in one phase. If the structure replacement occurs in two phases, the construction duration is anticipated to be 16 to 24 months; therefore, the one-phase construction is anticipated to shorten construction of each bridge by 8 to 12 months.

With one-phase construction, impacts to local commuters, residents, and local businesses would be more severe because of the required complete closure of the arterials at and approaching the overcrossings, affecting access and circulation. Traffic would be detoured to alternate routes, which will be identified and analyzed in the Final TMP to be prepared during the final design phase. The two-phase construction would allow the arterials and overcrossings to be opened to traffic during construction. However, less than half of the bridge width (due to placement of k-

rails, provision for deflection and requirement for construction room) would be available for traffic during each phase of construction; as such, the number of traffic lanes would be reduced at least by half. In addition, lane and shoulder widths would likely be narrowed, and sidewalk on at least on one side would be removed to accommodate the bridge construction in each phase.

The principal long-term closures to which the commenter refers are the closure of arterial overcrossings for replacement. Overcrossings could be fully closed and reopened in approximately 9 months, or partially closed (fewer and/or narrower lanes) and fully reopened in approximately 18 months. The closures will be more fully evaluated to balance potential congestion with closure duration during final design when the Final TMP is prepared in coordination with the municipalities whose arterials will be most affected by the bridge replacements, as specified in Draft EIR/EIS Mitigation Measure LU-2.

Comment GL14-197

The significance of the potential impacts of the build alternatives under CEQA was assessed based on the CEQA Environmental Checklist provided in Draft EIR/EIS Appendix A and the analyses of project impacts discussed in detail in Draft EIR/EIS Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures. The impacts of the build alternatives are summarized in Chapter 4, CEQA Evaluation, including the identification of the level of significance of the potential adverse effects under CEQA. This section discusses the impacts of the build alternatives. For a discussion of the impacts of the No Build Alternative, refer to Chapter 3.

Comment GL14-198

Caltrans is the Lead Agency for the proposed project and has full discretion to establish the criteria for determining significance under CEQA. Please see Common Response – Air Quality regarding the methodology used to complete the air quality analysis.

Comment GL14-199

The Draft EIR/EIS, including specialized technical studies (see Appendix F for a complete list), represents a comprehensive analysis of the potential temporary and permanent environmental effects of the proposed build alternatives on the environment. All feasible avoidance, minimization, and/or mitigation measures have been proposed in Chapters 3 and 4. Please see Responses to Comments GL14-190 and GL14-200 through GL14-203 and Common Response – Insufficient Environmental Document/Mitigation Measures.

Comment GL14-200

Detours will be more fully evaluated to minimize congestion during final design when the Final TMP is prepared in coordination with the municipalities whose roadways will be used for detours, as specified in Draft EIR/EIS Mitigation Measure LU-2. Further evaluation and studies will be performed during the final design phase to determine the final locations and feasibility of long-term arterial and ramp closures. This will encompass coordination with local agencies, emergency response units, and transit authorities.

Comment GL14-201

The closure options will be more fully evaluated to balance potential congestion with closure duration during final design when the Final TMP is prepared in coordination with the municipalities whose arterials will be most affected by the bridge replacements, as specified in Draft EIR/EIS Mitigation Measure LU-2. That coordination will include emergency service providers including, but not limited to, those emergency services provided by local jurisdiction, as well as access to hospitals.

Further evaluation and studies will be performed during the final design phase to determine the final locations and feasibility of long-term arterial closures. This will encompass coordination with various cities, emergency response units, and transit authorities. The environmental effects will be analyzed as part of the supplemental evaluation and will include potential effects on emergency responses surrounding the project corridor, including Orange Coast Memorial Hospital at the southeast quadrant of the Brookhurst Street/Talbert Avenue intersection.

Comment GL14-202

Absent final design plans, it is not possible to finalize the detours or any plans for their improvement; however, Draft EIR/EIS Mitigation Measure LU-2 does obligate Caltrans to develop the TMP: "Caltrans shall implement a TMP throughout the duration of the construction activities and make this document available to the public. The TMP shall seek to minimize project-related construction disruptions and would include traffic strategies designed in coordination with local jurisdictions."

Comment GL14-203

Consistent with Caltrans policy, the EIR/EIS is based on preliminary engineering. All environmental project effects and avoidance, minimization, and/or mitigation measures for the project have been identified in the EIR/EIS. None of the proposed mitigation measures listed in Section 4.2.8 would result in additional significant impacts. Analysis of all known physical changes is provided in Chapters 3 and 4. As required by NEPA and CEQA, any changes to the

project that occur during final design would have to be reconsidered as required by CEQA (addendum or supplemental or subsequent EIR) and NEPA (re-evaluation), as applicable.

Comment GL14-204

At the time the Draft EIR/EIS was published, the 2012 FTP had not yet been approved by FHWA/FTA. It is Caltrans policy that at least one of the alternatives must be consistent with the conforming RTP/FTP, which at the time was the 2008/2010 documents. FHWA conformity finding for the 2012 RTP/Sustainable Communities Strategy (SCS) was issued on June 4, 2012, subsequent to circulation of the Draft EIR/EIS in May 2012.

Comment GL14-205

The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the PDT, based to the extent possible on the results of field surveys and technical studies. Because the significance of an effect may vary depending on the environmental setting, set rules for determining significance in every case have not been established. Some public agencies have established thresholds of significance for CEQA. Because Caltrans has statewide jurisdiction and the setting for projects varies so extensively across the state, Caltrans has not and has no intention to develop thresholds of significance for CEQA. The determination of significance under CEQA is left to the internal PDT, with particular deference paid to the expertise of environmental staff and other specialists.

Comment GL14-206

The determination of significance under CEQA is left to the internal PDT. Please see also Response to Comment GL14-205.

Comment GL14-207

The checklist was used as a tool in helping to identify significant impacts in the document as opposed to its traditional use in an Initial Study. The environmental document was identified as an EIR in the NOP, and an Initial Study was not prepared for the I-405 Improvement Project. Please see also Response to Comment GL14-205.

Comment GL14-208

Table 3.2.6-1 on page 3.2.6-3 of the EIR/EIS includes all NAAQS and California Ambient Air Quality Standards (CAAQS). SCAQMD established significance thresholds that may be used to assess projects within their jurisdiction, but they do not establish air quality standards. In regards to making conclusions without presenting SCAQMD guidance, Caltrans is the Lead Agency for the proposed project and has full discretion to establish the criteria for determining significance

under CEQA. Please see Common Response – Air Quality regarding the methodology used to complete the air quality analysis.

Comment GL14-209

The environmental document is a joint CEQA/NEPA document. Although there is some overlap between NEPA avoidance and minimization measures and CEQA mitigation measures, CEQA mitigation measures are specifically identified in Section 4.2.8 of the Draft and Final EIR/EIS.

Comment GL14-210

Please see Response to Comment GL14-32.

Comment GL14-211

All feasible avoidance, minimization, and/or mitigation measures have been proposed in Chapters 3 and 4. Caltrans disagrees with the commenter that the proposed measures do not serve to reduce, avoid, eliminate, rectify, or compensate for the applicable environmental effects discussed in Chapters 3 and 4. Please see Responses to Comments GL14-190 and GL14-200 through GL14-203 and Common Response – Insufficient Environmental Document/Mitigation Measures.

Comment GL14-212

Mitigation Measure LU-2 was revised to "A purpose of the TMP is to minimize…" as is required by Caltrans.

Comment GL14-213

The Final TMP is prepared by the contractor who will build the project. The contractor will be required, at a minimum, to implement the referenced strategies, as applicable, with the purpose to minimize project-related construction disruption on businesses, service providers, residents, pedestrians, cyclists, and freeway and local traffic. A Final TMP nor the specific strategies can be developed until the construction staging is known based on the contractor's construction plan.

Comment GL14-214

As described in Section 4.2.8, Mitigation Measures T-1 and COM-1 through COM-14 are legally binding. Unless measures are removed as part of a future Addendum to the EIR or as considered within a subsequent or supplemental EIR, monetary incentives for acceleration of construction of project components would not jeopardize required implementation by the contractor.

Comment GL14-215

Some level of inconvenience is likely when closures necessitate detours. As stated in Draft EIR/EIS Mitigation Measure LU-2: "The TMP shall seek to minimize project-related

construction disruptions…." It is not possible to perfectly predict the responses of all motorists to the closures and detours; the commitment in LU-2 is to "seek to minimize project-related construction disruptions." It is also not possible to finally determine what those detours will be prior to final design. The Draft EIR/EIS discloses the information available at this time and acknowledges that conditions may change by requiring development of the TMP in coordination with local jurisdictions. The Final TMP will be developed during the final design phase to study and determine required closures, alternative routes, and detours in more detail. This will encompass coordination with local agencies, emergency response units, and transit authorities. The environmental effects will be analyzed as part of the detailed evaluation, including potential increases in traffic on the local street network due to diverted traffic and detours. Improvements to local arterials and signalization, where required, would be undertaken to address this issue.

Comment GL14-216

Draft EIR/EIS Mitigation Measure COM-4 requires provision of motorist information during construction to alert motorists to travel delays and detours potentially resulting from construction. The actual action is the provision of the information.

Comment GL14-217

The language of Draft EIR/EIS Mitigation Measure UT-2 does not indicate a delegation of the responsibility to implement the mitigation. It does obligate Caltrans to notify emergency providers of temporary road closure to allow them to plan their emergency service delivery. Caltrans is ultimately responsible to ensure implementation of all of the mitigations included in the Final EIR/EIS. Caltrans cannot dictate how a service provider will respond to a roadway closure; however, Caltrans is required to develop the TMP in coordination with local jurisdictions (see Draft EIR/EIS Mitigation Measure LU-2), who are the operators of most emergency services in the corridor.

Comment GL14-218

Please see Response to Comment GL14-217.

Comment GL14-219

Please see Response to Comment GL14-217.

Comment GL14-220

The Aesthetics and Landscape Master Plan for the I-405 corridor can be obtained from Caltrans. As part of this project, the Aesthetics and Landscape Master Plan will be updated, coordinated, and reviewed through the corridor city stakeholder working group to incorporate desired

elements and themes for the corridor. The process was identified in Mitigation Measure VIS-5 provided below.

"VIS-5: Beginning with preliminary design and continuing through final design and construction, develop construction plans that apply architectural detailing to the proposed soundwalls, retaining walls, and bridges, including textures, colors, and patterns. Include elements such as caps, columns, pier caps, parapets, fencing, and abutment and wing walls as shown in the Aesthetics and Landscape Master Plan. In addition, bridge or architectural elements on ramps, bridges, and soundwalls will include forms and lines to match the existing built-environment features."

Comment GL14-221

As described in Appendix F, List of Technical Studies, "The technical studies prepared to support the analysis and conclusions contained in this Draft EIR/EIS are listed on the following page. These studies have been bound separately, and copies are available for public review from May 18, 2012, to July 2, 2012, at the following locations:

California Department of Transportation, District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612

Orange County Transportation Authority
550 South Main Street
Orange, CA 92863
www.octa.net/405improvement

All technical studies remain available for review at the addresses provided above.

Comment GL14-222

Regarding relocation of overhead utilities, please see Response to Comment GL14-35.

Comment GL14-223

All of these items are related to the financing of Alternative 3, which refers to further study that is being undertaken by OCTA on the value of time, travel time savings, dynamic tolling, and financial mechanisms to leverage additional financing. Finance methods do not in and of themselves have environmental impacts; therefore, they are not a subject of the Draft EIR/EIS.

Comment GL14-224

In the context of the comment, the value of time is related to leveraging additional financing for Alternative 3. See Response to Comment GL14-223.

Comment GL14-225

All important physical and operational characteristics for Alternative 3 were summarized in the Draft EIR/EIS. The referenced Expression of Interest in tolling is a public document and is available by request. The Expression of Interest is not part of the Draft EIR/EIS.

Comment GL14-226

It is customary to submit the Draft Modified Access Report prior to circulation of the Draft EIR/EIS and prior to identification of the Preferred Alternative. The Draft Modified Access Report is not part of the Draft EIR/EIS. It is also customary to submit an Expression of Interest in Tolling Authority during the environmental process as soon as an alternative is identified that would require federal tolling authority because this can be a lengthy process. An expression of interest is neither a commitment to toll nor an indication of a predisposition. The customary process has been followed in both cases, and neither is indicative of a predetermination of the Preferred Alternative.

Comment GL14-227

As shown in Tables 3.2.6-6 and 3.2.6-7 on page 3.2.6-25 of the EIR/EIS, the air quality analysis concludes that each build alternative would decrease regional emissions. As a result, regional emissions are not considered an "area of controversy" or an "issue to be resolved" under the State CEQA Guidelines. Please see Common Response – Insufficient Environmental Document/ Mitigation Measures.

Comment GL14-228

Alternative 4 was eliminated from further discussion for the reasons described in the Draft EIR/EIS on page 2-37. The decision to eliminate Alternative 4 is fully disclosed in the Draft EIR/EIS. CEQA and NEPA do not require carrying all alternatives through the entire environmental process.

Comment GL14-229

It is customary to submit an Expression of Interest in Tolling Authority during the environmental process as soon as an alternative is identified that would require federal tolling authority because this can be a lengthy process. An expression of interest is neither a commitment to toll nor an indication of a predisposition. The customary process has been followed with respect to the Expression of Interest and with respect to the Draft Modified Access Report, and neither is

indicative of a predetermination of the Preferred Alternative. Please see Response to Comment GL14-226.

Comment GL14-230

Please see Response to Comment GL14-229.

Comment GL14-231

Please see Response to Comment GL14-229. The contractual delivery method of constructing and operating the project would not result in an environmental impact; therefore, it is not covered in the Draft EIR/EIS.

Comment GL14-232

The environmental justice analysis was prepared in accordance with Executive Order (EO) 12898, which required each federal agency (or its designee) to take the appropriate and necessary steps to identify and address "disproportionately high and adverse" effects of federal proposed projects on the health or environment of minority and low-income populations. The environmental justice analysis for the proposed project is provided in Section 3.1.4.3 of the Draft EIR/EIS. Based on discussion and analysis in Section 3.1.4.3 and with incorporation of all avoidance, minimization, and/or mitigation measures discussed throughout Chapter 3, the proposed project alternatives would not cause disproportionately high and adverse effects on minority or low-income populations within the context and intent of EO 12898.

Comment GL14-233

Speed and throughput are not the only available metrics by which to determine best use of the available freeway property or to compare the traffic characteristics of the alternatives. The Draft EIR/EIS provides tables throughout Section 3.1.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, that show LOS, vehicle density, V/C ratios, ADT, VMT, corridor travel time, vehicle hours of delay, vehicle storage, and queuing, as well as speed and throughput. Furthermore, the CEQA and NEPA processes are not bound by local funding legislation.

Comment GL14-234

A wider range of alternatives was considered as part of the I-405 MIS and is summarized in Section 2.2.7. The Preferred Alternative optimizes transportation investment by providing the greatest throughput and shortest travel times in both the Toll Express Lane Facility and in the GP lanes.

Comment GL14-235

The costs of the alternatives are included in the Draft EIR/EIS and are not reported to be $5.8 billion. Please see Response to Comment GL14-132 and Common Response – Measure M Funding.

Comment GL14-236

It is appropriate and applicable to involve the stakeholders before and during construction along the project to create and encourage strategies for managing traffic. It is important to include employers in solutions that can include large numbers of commuters. This is one important component of the demand management strategy. Alternatives with LRT and BRT are included in the Draft EIR/EIS in Section 2.2.7, Alternatives Considered but Eliminated from Further Consideration. That section explains each of those alternatives and why they were eliminated. For a graphic summary of those alternatives, see Figure 2-39 of the Draft EIR/EIS.

Traffic demand management was included in the TSM/TDM Alternative included in the Draft EIR/EIS. The TSM/TDM Alternative does not meet the purpose and need of the project, as described in Section 2.2.4 of the Draft EIR/EIS. TSM/TDM elements are included in each of the build alternatives. As described in Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, of the Draft EIR/EIS, TSM and TDM components, including multimodal alternatives, were included and evaluated in various forms in the initial 13 MIS alternatives (see Section 2.2.4). All of the alternatives included park-and-ride facilities, as well as either enhanced local bus service, express bus service, or both. Although a TSM/TDM Alternative as an effective stand-alone alternative does not meet the project purpose, as explained in Draft EIR/EIS Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, the PDT identified the proposed TSM and TDM elements for the corridor. These elements would be implemented as part of Alternatives 1, 2, and 3, as described in Draft EIR/EIS Section 2.2.1, Common Design Features of the Build Alternatives,

Additionally, bike and pedestrian improvements are included in the project, as identified in the Draft EIR/EIS on page 3.1.6-103.

The considerations identified above for transit, TSM/TDM, bike, and pedestrian improvements are fully consistent with the Caltrans focus on Corridor System Management Plans.

Comment GL14-237

The regional transportation planning process is the appropriate venue for consideration of improvements to the entire I-405 corridor in Los Angeles and Orange counties. As part of that process, the portion of the I-405 corridor in which the proposed project would make

improvements is included in both the 2008 and 2012 RTP. The COG has completed the most recent planning studies for improvements to I-405 north of I-605 in Los Angeles County. Projects currently being planned in Los Angeles County to widen I-405 by one or two lanes in each direction and/or to include Express Lanes are still in the early planning stages. The *SR-91/I-605/I-405 Congestion Hot Spots Study* prepared by Metro and the COG in 2012 is the most recent planning document that includes and evaluates potential improvements along the I-405 and I-605 corridors north of the I-405/I-605 interchange. Preparation of Project Study Reports covering discrete portions of SR-91, I-605, and I-405 is the next step in advancing projects in this area.

The length of the project will be consistent in the Final EIR/EIS. Please see Response to Comment GL14-80.

Comment GL14-238

The regional transportation planning process is the appropriate venue for consideration of improvements to the entire managed lanes system in southern California. As part of that process, the portion of the I-405 corridor in which the proposed project would make improvements is included in both the 2008 and 2012 RTP. Additionally, the 2012 RTP includes a plan for implementation of a network of Express Lanes throughout southern California, as explained on page 3.1.6-96 of the Draft EIR/EIS.

Comment GL14-239

Please see Common Response – Coordination between Caltrans Districts 7 and 12, OCTA, Los Angeles Metro, COG, and the City of Long Beach.

Comment GL14-240

It is common for a transportation project to have a funding shortfall in the planning phase. The project is considered a Major Project by FHWA, and a Draft FP must be submitted to FHWA prior to approval of the Final EIR/EIS. The Draft FP must identify full funding for the project.

Comment GL14-241

The Draft EIR/EIS inherently acknowledges that, while all of the build alternatives are anticipated to reduce congestion in the I-405 corridor, none are expected to eliminate congestion in the corridor or provide performance with established traffic service objectives. The Caltrans Highway Design Manual (HDM), which identifies freeway and arterial design standards, states (Section 102.1): “Freeways should be designed to accommodate the design year peak-hour traffic volumes and to operate at a LOS determined by District Planning and/or Traffic Operations.” The HDM also provides a table indicating that LOS in urban areas should be in the

range of C to E. There are no LOS standards specified in the Measure M Extension. The Draft EIR/EIS inherently acknowledges that, while all of the build alternatives are anticipated to reduce congestion in the I-405 corridor, none are expected to eliminate congestion in the corridor, and none are anticipated to achieve LOS E during the peak hour, except in the Express Lanes of Alternative 3 where LOS C and D are anticipated. For the freeway to achieve LOS E during peak hours in the portion that is currently 10 lanes wide (5 lanes in each direction from Brookhurst Street to SR-22 East), it has been estimated that at least 10 additional lanes would be needed. Some reduction in the extent of this doubling of the freeway width may be possible through the use of managed lanes, TDM/TSM, transit, and other techniques. No feasible package of the full array of actions, including widening, is anticipated to provide LOS E conditions during peak hours because of the extent of latent demand for I-405. For LOS data on the freeway mainline, see Draft EIR/EIS Tables 3.1.6-4, 3.1.6-5, 3.1.6-12, and 3.1.6-13.

Comment GL14-242

No changes in bus routes are included as part of the proposed project. Alternatives with LRT and BRT are included in the Draft EIR/EIS in Section 2.2.7, Alternatives Considered but Eliminated from Further Consideration. That section explains each of those alternatives and why they were eliminated. Changes in bus service are not part of the No Build Alternative. Implementation of the build alternatives would improve arterials in the vicinity of I-405 and provide some improvement to bus travel times through interchange areas.

Comment GL14-243

Alternatives M3, M9, M10, M11, M12, and M13 (see Section 2.2.7 and Figure 2-8), evaluated as part of the I-405 MIS (2003-2006), included project components similar to what you are recommending within your comment. Although high-speed rail was not considered in the Draft EIR/EIS, LRT and BRT were considered for the corridor. High-speed rail would have many of the same drawbacks as LRT and BRT that are more fully covered in Common Response – Elimination of LRT and BRT Alternatives.

Comment GL14-244

HOV lane and Express Lane enforcement is not anticipated to have any environmental impacts; therefore, it was not identified in the Draft EIR/EIS. Enforcement areas are located in the median of the freeway and would shift the median barrier to provide a wider shoulder for enforcement. The environmental impacts with or without enforcement areas are not different. There is no evidence that enforcement of the occupancy requirement on SR-91 or on the existing HOV lanes on I-405 contributes to substantial nonrecurring congestion.

Comment GL14-245

Alternatives with dual HOV lanes are included in the Draft EIR/EIS in Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion. MIS Alternatives 2, 8, and 11 include dual HOV lanes in each direction. They were eliminated from further discussion in part because, as the Draft EIR/EIS states on page 2-41, the dual HOV lanes "would include substantially underutilized HOV lane capacity in the southern part of the corridor with V/C ratios of 0.70 or less."

Comment GL14-246

All reported ROW information presented in the EIR/EIS is considered preliminary based on the best available information. Final ROW requirements cannot be determined until the next phase of the project and are subject to change. Section 3.1.4.2, Relocations and Real Property Acquisitions, of the Draft EIR/EIS addresses impacts to the communities as a result of required ROW acquisitions and project construction activities. Appendix T will be added to the Final EIR/EIS. The information in Appendix T will identify all properties that would be affected by full and partial acquisitions and TCEs for the Preferred Alternative.

Comment GL14-247

The climate change analysis presented in Chapter 4 (Section 4.2.7) of the EIR/EIS states that each build alternative would generate less GHG emissions than future no-build alternatives. In addition, Caltrans is supporting efforts to reduce VMT by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high-density housing along transit corridors. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars and light- and heavy-duty trucks; Caltrans is doing this by supporting ongoing research efforts at universities, supporting legislative efforts to increase fuel economy, and participating on the Climate Action Team. It is important to note, however, that control of the fuel economy standards is held by EPA and CARB. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California at Davis.

To the extent that it is applicable or feasible for the project and through coordination with the PDT, the following measures will also be included in the project to reduce the GHG emissions and potential climate change impacts from the proposed project:

- Caltrans and CHP will work with regional agencies to implement ITS to help manage the efficiency of the existing highway system. ITS is commonly referred to as electronics,

communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

- SCAG will provide ridesharing services and park-and-ride facilities to help manage the growth in demand for highway capacity.
- The construction contractor will comply with SCAQMD rules, ordinances, and regulations in regards to air quality restrictions.

It is Caltrans' determination that, in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a determination regarding the significance of the project's direct impact and its contribution on the cumulative scale to climate change; however, Caltrans is firmly committed to implementing measures to help reduce potential effects of the project.

Comment GL14-248

Page 4-58 of the EIR/EIS includes a discussion related to Caltrans' involvement in implementing EOs S-3-05 and S-01-07 to help achieve GHG targets set forth in Assembly Bill (AB) 32. The climate change analysis presented in Chapter 4 (Section 4.2.7) of the EIR/EIS states that each build alternative would generate less GHG emissions than future no-build alternatives. This is consistent with Statewide efforts to reduce GHG emissions. Please see Response to Comment GL14-247 for a detailed discussion of climate change and GHG emissions.

Comment GL14-249

Please see Response to Comment GL14-248.

Comment GL14-250

Please see Response to Comment GL14-248.

Comment GL14-251

The referenced text is only describing the difference in the CEQA and NEPA terminology related to definition and use of the term significance between the NEPA analysis in Chapter 3 and the CEQA analysis in Chapter 4.

Comment GL14-252

Please see Response to Comment GL14-248.

Comment GL14-253

Please see Common Response – Health Risks.

Comment GL14-254

Caltrans is the Lead Agency for the proposed project and has full discretion to establish the criteria for determining significance under CEQA. Please see Common Response – Air Quality regarding the methodology used to complete the air quality analysis.

The CARB *Air Quality and Land Use Handbook* (Handbook) was developed as a guide for siting new sensitive receptors near facilities that release air toxics. The Handbook was not developed as guidance related to improving existing facilities. It is accurate that the Handbook lists recommended separation distances between freeways and sensitive receptors. It is also accurate that the SCAQMD MATES-II Study identified the highest regional cancer risks as being located adjacent to freeways, with 94 percent of the regional cancer risk associated with mobile sources; however, DPM emissions associated with the build alternatives would be less than No Build Alternative emissions. Please see Common Response – Health Risk regarding cancer risk.

Comment GL14-255

The MSAT Analysis was completed based on guidance provided by FHWA and supported by Caltrans. Refer to http://www.fhwa.dot.gov/environment/air_quality/air_toxics/ for supporting documentation related to this analysis. The comment also states that criteria pollutant and VOC emissions are detrimental to health. As shown in Tables 3.2.6-6 and 3.2.6-7 on page 3.2.6-25 of the EIR/EIS, the air quality analysis concludes that each build alternative would generate less regional emissions than existing conditions and future no build alternatives.

Comment GL14-256

Please see Common Response – Health Risks.

Comment GL14-257

Please see Common Response – Health Risks.

Comment GL14-258

Please see Common Response – Health Risk.

Comment GL14-259

EPA submitted separate comment letters for the proposed project and the I-710 Corridor Project. Please see Response to Comment GF4-1 regarding the EPA letter related to the proposed project, including the air quality comment. No further analysis is required related to the EPA comment submitted on other projects.

Comment GL14-260

With respect to a bottleneck northbound on I-405 near the county line, please see Common Response – Traffic Flow at the Orange County/Los Angeles County Line.

Comment GL14-261

The MSAT Analysis, including DPM, was completed based on guidance provided by FHWA and supported by Caltrans. Refer to http://www.fhwa.dot.gov/environment/air_quality/air_toxics/ for supporting documentation related to this analysis. No impacts were identified, and further analysis is not required.

Comment GL14-262

Ground-borne vibrations and noise from highway operations is typically not a problem because the rubber tires and suspension systems of vehicles that travel on highways provide vibration isolation; however, vibrations may occur due to irregularities in the roadway surface, such as cracks, potholes, and expansion joints. If any of these irregularities are causing perceptible vibrations, they should be reported to the Caltrans maintenance department so that they may repair the problem. Furthermore, per Caltrans' Technical Advisory on Vibration titled "Transportation Related Earthborne Vibrations," the maximum highway truck vibration levels at a distance of 15 ft are well below the threshold of architectural building damage; therefore, there will not be any significant impacts because no buildings would be located at a distance of 15 ft from a truck traveling at highway speeds. However, results of vibration studies conducted by Caltrans indicate that vibrations from heavy trucks may be noticeable at distances up to 120 ft from the centerline of the nearest lane.

Concerning ground-borne noise, it does not apply to the I-405 Improvement Project because vibration levels caused by highway traffic is so low, it is unusual for highway operations to cause ground-borne noise. Ground-borne noise typically is associated with rail transit vehicles such as underground subway trains.

Temporary construction vibrations impacts may be anticipated due to activities such as pile driving, pavement breaking, and vibratory rolling. A detailed construction-related vibration analysis will be conducted before construction begins, and potential construction vibration impacts will be identified in a construction Noise and Vibration Monitoring and Mitigation Plan.

Comment GL14-263

Alternatives 1 and 2 include the addition of GP lanes. In the case of Alternative 3, no one is obligated to use the Express Lanes. Alternative 3 Express Lanes provide an option for a reliable

uncongested trip in exchange for payment of a toll, as discussed in Section 3.1.6 of the Draft EIR/EIS.

A comparison of the data in Table 3.1.6-7 of the Draft EIR/EIS shows that under Alternative 3 all users of I-405, whether they use the GP lanes or the Express Lanes, will be better off (have shorter travel time) than under the No Build Alternative.

Comment GL14-264

Please see Response to Comment GL14-263.

Comment GL14-265

Please see Response to Comment GL14-263.

Comment GL14-266

Please see Response to Comment GL14-263.

Comment GL14-267

If Alternative 3 is identified as the Preferred Alternative, OCTA/Caltrans could consider, as determined appropriate, similar types of programs and incentives for low-income commuters as part of the overall tolled Express Lane operating policy.

Comment GL14-268

Any and all implications of House Resolution 4338 are not required in the EIR/EIS. HR 4338 has not been passed, and what is currently proposed may not be what would be approved, if it is approved. No analysis of any pending legislation is included in the Final EIR/EIS.

Comment GL14-269

Any and all implications of Senate Bill 1813 are not required in the EIR/EIS. Senate Bill 1813 has not been passed, and what is currently proposed may not be what would be approved, if it is approved. No analysis of any pending legislation is included in the Final EIR/EIS.

Comment GL14-270

All comments sent to any of the referenced locations or addresses for either mail or e-mail have been considered and responded to within the Final EIR/EIS. Please see also Response to Comment GL14-7.

Comment GL14-271

The Draft EIR/EIS provides tables throughout Section 3.1.6, Traffic and Transportation/ Pedestrian and Bicycle Facilities, that show LOS, vehicle density, V/C ratios, ADT, VMT,

corridor travel time, vehicle hours of delay, speed, vehicle storage, and queuing, as well as throughput.

Comment GL14-272

No quantification is available for the extent to which congestion pricing along the limited distance of the I-405 corridor would affect carpool formation.

Comment GL14-273

The LOS method was augmented with additional metrics because there is little differentiation among the alternatives based on LOS for the freeway mainline. The additional metrics include V/C ratios, speed, corridor travel time, and daily and annual vehicle hours of delay.

Comment GL14-274

Ramp meters were analyzed for their potential to create queues backing onto and disrupting the operations of arterial roadways. The results of that analysis are summarized in Draft EIR/EIS Table 3.1.6-11. More detailed information is provided in the Traffic Study in the subsections of Chapter 3 devoted to individual interchanges. Under jammed freeway conditions, the effectiveness of ramp meters is negated because the freeway is not capable of receiving even the lower metered flow of traffic onto the freeway; therefore, an analysis of traffic conditions under metered ramp conditions was not provided.

Comment GL14-275

With respect to the potential unique travel patterns associated with the build alternatives, please see Response to Comment GL14-117.

Comment GL14-276

The traffic analysis presented in Section 3.1.6 of the Draft EIR/EIS accurately predicts the traffic conditions anticipated in the future.

Comment GL14-277

The speed index is used because the LOS F conditions anticipated will result in unstable traffic speeds that will be inconsistent along the corridor, with some motorists experiencing fully stopped conditions in some locations at some times and other motorists experiencing different conditions at those same locations. Over the length of the entire corridor, speeds should be generally and comparatively consistent with the summary speed data presented in the Draft EIR/EIS in Table 3.1.6-6. The traffic analysis presented in Section 3.1.6 of the Draft EIR/EIS accurately predicts the traffic conditions anticipated in the future.

Comment GL14-278

With respect to the potential unique travel patterns associated with the build alternatives, please see Response to Comment GL14-117.

Comment GL14-279

With respect to the potential unique travel patterns associated with the build alternatives, please see Response to Comment GL14-117.

Comment GL14-280

The HCM LOS method was augmented with additional metrics because there is little differentiation among the alternatives based on LOS for the freeway mainline. The additional metrics include V/C ratios, speed, corridor travel time, and daily and annual vehicle hours of delay.

Comment GL14-281

The MIS included analysis of a broad corridor area identified as the Tier 2 study area and shown in Figure 1-1 of the *Interstate 405 Major Investment Study Final Report* (February 2006). The Tier 2 study area extends west of I-405 to the ocean and east 2 to 3 miles, as well as north and south of the project limits 2 to 3 miles. Tier 2 encompasses the "influence" area of the segment of I-405 that is the subject of the MIS. Transit services extending beyond the study area into downtown Long Beach and to John Wayne Airport were included in the MIS. Extensive transit improvements were considered and are covered in Section 3.2.2 of the MIS Final Report. Express bus services were included in MIS Alternatives 6 and 8a, as described in the MIS Final Report on page 29 and in Table 3-3. BRT operating in the median of I-405 with station stops along I-405 at arterials was proposed in MIS Alternative 8; the BRT served the corridor from John Wayne Airport to downtown Long Beach, as shown in Figure 3-7 of the MIS Final Report.

Comment GL14-282

Please see Response to Comment GL14-281.

Comment GL14-283

SCAQMD monitors air quality conditions at 37 locations throughout the basin. I-405 borders the Inland Orange County and Coastal air monitoring subregions. The most relevant monitoring station to the project area is the Costa Mesa Monitoring Station. Alternative air monitoring stations are located in Anaheim, Long Beach, and Lake Forest. These stations are farther from the project area than the Costa Mesa Monitoring Station and were determined to not accurately represent existing air quality conditions in the vicinity of the project area. Historical data from the Costa Mesa Monitoring Station were used to characterize existing conditions in the vicinity of the project area.

Comment GL14-284

Air quality data from 2010 were not available when the analysis was completed. It is not anticipated that regional air quality significantly changed between 2009 and 2010.

Comment GL14-285

Caltrans does not consider commercial and industrial facilities to be sensitive to air quality emissions. In addition, the CO analysis was completed based on the methodology provided in the Caltrans Transportation Project-Level Carbon Monoxide Protocol. A worst-case representative sample of intersections was chosen based on low LOS and high traffic volumes. The State 1- and 8-hour standards of 20 and 9.0 parts per million (ppm), respectively, would not be exceeded at the analyzed intersections; therefore, Alternative 1 would not result in a CO hot spot.

The PM analysis followed the appropriate hot-spot guidance established by EPA, which included assessment of the 24-hour standard. No further analysis is required.

Comment GL14-286

The air quality analysis for the proposed project was initiated in 2009. It is Caltrans policy to use EMFAC 2007 for environmental studies initiated before October 1, 2011.

Comment GL14-287

The comment is related to completing a certain analysis recommended by SCAQMD (localized emissions). Please see Common Response – Air Quality regarding the methodology used to complete the air quality analysis.

Comment GL14-288

Please see Response to Comment GL14-287 regarding the assessment of localized emissions.

Comment GL14-289

Please see Response to Comment GL14-287 regarding the assessment of localized emissions.

Comment GL14-290

Please see Response to Comment GL14-287 regarding the assessment of localized emissions.

Comment GL14-291

Please see Response to Comment GL14-287 regarding the use of SCAQMD regional thresholds of significance.

Comment GL14-292

The comment states that the CO analysis contained on page 3.2.6-33 of the EIR/EIS does not include a "link" analysis for the freeway and fails to include the contribution of the CO emissions from the freeway at the local intersections. The analysis on page 3.2.6-33 is related to the project-level conformity assessment. The CO analysis completed for this segment was accurately based on the methodology provided in the Caltrans Transportation Project-Level Carbon Monoxide Protocol, which was designed for intersection analyses. A worst-case representative sample of intersections was chosen based on low LOS and high traffic volumes. The estimated CO concentrations include emissions associated with intersection movements and background CO concentrations obtained from the local monitoring station. Regarding the "link" analysis, please see Common Response – Air Quality regarding the methodology used to complete the air quality analysis.

Comment GL14-293

Please see Response to Comment GL14-284 regarding historical air quality data.

Comment GL14-294

Please see Response to Comment GL14-285 regarding 2010 air quality data.

Comment GL14-295

Please see Common Response – Air Quality regarding the methodology used to complete the air quality analysis.

Comment GL14-296

Please see Response to Comment GL14-288 regarding the use of SCAQMD thresholds of significance.

Comment GL14-297

Please see Response to Comment GL14-296 regarding the existing conditions.

Comment GL14-298

Please see Response to Comment GL14-288 regarding the use of SCAQMD thresholds of significance.

Comment GL14-299

The proposed project was presented to the SCAG Transportation Conformity Working Group (TCWG) to determine the requirements for a transportation conformity hot-spot analysis. Membership of TCWG includes federal (EPA, EPA Region 9, FHWA, FTA), State (CARB, Caltrans), regional (Air Quality Management Districts, SCAG), and sub-regional (County

Transportation Commissions) agencies and other stakeholders. On January 25, 2011, the TCWG determined that a qualitative PM hot-spot analysis was required for the proposed project. On February 27, 2012, EPA announced in the *Federal Register* that the grace period for completing qualitative hot-spot analyses has been extended until March 2, 2013. Further analysis is not required.

Comment GL14-300

Please see Response to Comment GL14-299 regarding the requirements for a quantitative hot-spot analysis.

Comment GL14-301

The comment correctly identifies that the corridor length used to estimate emissions in RoadMOD was 14 miles instead of 16 miles. The model was updated, and the results indicated that daily VOC and CO emissions would increase by 1.2 percent, NO_X emissions would increase by 0.2 percent, and carbon dioxide (CO_2) emissions would increase by 1.5 percent. PM emissions were not different than what was presented in the EIR/EIS. This change in emissions would not result in new impacts, and further analysis is not required.

Comment GL14-302

The CO analysis was based on the Caltrans Transportation Project-Level Carbon Monoxide Protocol; however, an adjustment was made to account for the use of CAL3QHS as opposed to CALINE4. The Caltrans Carbon Monoxide Hot Spot Analysis Web site (http://www.dot.ca.gov/hq/env/air/pages/CO.htm) states that "CO hot spot modeling based on EPA's standard Modeling Guidance is acceptable if EMFAC is used to generate emission factors instead of EPA's MOBILE or MOVES models." CAL3QHC is a model approved by CARB and EPA, and is a CALINE3-based CO model with queuing and hot-spot calculations and with a traffic model to calculate delays and queues that occur at signalized intersections.

While the approach and departure distances can be lengthened, it is not anticipated that the increased distance would substantially affect intersection concentrations. Most of the emissions estimated using the CAL3QHC model are relating to queued vehicle idling. Increasing the approach and departure distances would not affect these stopped vehicles. In addition, worst-case emissions were estimated to be well below the 1- and 8-hour State standards in 2020 (80 and 59 percent, respectively). Increasing the distances would not double CO concentrations and would not demonstrate the exceedance of any CO standard.

Comment GL14-303

In the CEQA checklist, the mentioned applicable standards are held to the level of government at which the lead agency operates, which is Caltrans in this case. This interstate facility operates

within the State of California ROW and is obligated to fulfill federal and State laws, policies, and procedures. The Community Noise Equivalent Level (CNEL) noise metric differs from the peak-hour Equivalent Sound Level over 1-hour ($L_{eq[h]}$) used by Caltrans in accordance with the NAC of Title 23, Part 772 of the CFR, titled "Procedures for Abatement of Highway Traffic Noise and Construction Noise;" therefore, CNEL values were not used for the analysis. For this project, significant impacts under CEQA guidelines were determined to occur if the predicted build alternative traffic noise levels were more than 5 dB above the predicted No Build Alternative traffic noise levels.

Please see Section 4.2.2.9, Noise Checklist Questions, of the EIR/EIS for the discussion of criteria used for CEQA-related noise issues.

Comment GL14-304

As a result of this project, there is no significant noise impact because nowhere in the project is noise increased by 12 dB, which is the threshold for a significant impact. Therefore, no mitigation is required under CEQA.

Please also see Response to Comment GL14-307 for a discussion of feasibility, cost analysis, reasonableness, and impacts under CEQA guidelines.

Comment GL14-305

Typically, unless the project proposes to construct a new freeway facility, an increase in noise levels of 12 dB or more above existing levels is not realized. In the Seal Beach area, the traffic noise levels were predicted to increase from zero to 3 dB above the existing noise level, which is much lower than 12 dB.

Comment GL14-306

Out of the 30 locations where long-term measurements were taken, only 2 measurements fell short of recording data for a full 24 hours. Because removal of the sound-level meter required access to private property, the long-term noise measurement at 3077 Yukon Avenue was cut short of 24 hours by 1-hour at the request of the homeowner who needed to leave the residence. The peak traffic noise hours of the morning and afternoon periods were discernable from the acquired data.

Comment GL14-307

Soundwalls were evaluated in accordance with State and federal guidelines, which include Caltrans' Traffic Noise Analysis Protocol and the NAC of Federal Title 23, Part 772 of the CFR, titled "Procedures for Abatement of Highway Traffic Noise and Construction Noise." The determination of whether a soundwall is recommended is a successive process where several

considerations must be satisfied for continuance; not based on the step of that process where a particular abatement measure fails to meet required criteria. The process is described in the following paragraphs:

> *The Noise Study Report shows the impact analysis and identifies feasible traffic noise abatement from an acoustic standpoint. The NADR determines the reasonableness of the feasible traffic noise abatement measures presented in the Noise Study Report. Furthermore, feasibility – providing 5 dB of traffic noise reduction – must be achieved for at least one impacted frequent outdoor use area before the reasonableness determination for a soundwall can be made.*
>
> *Caltrans' Protocol defines the procedure for assessing reasonableness of noise barriers from a cost perspective. A cost-per-residence allowance is calculated for each benefited residence (i.e., residences that receive at least 5 dB of noise reduction from a noise barrier). Caltrans' published 2009 base allowance of $31,000 was used for this project. Additional allowance dollars are added to the base allowance based on absolute noise levels, the increase in noise levels resulting from the project, achievable noise reduction, and the date of building construction in the area. Total allowances are calculated by multiplying the cost-per-residence by the number of benefited residences.*
>
> *Recommended soundwalls are usually both feasible and reasonable from an acoustic and cost consideration standpoint, respectively; however, there are examples where a soundwall could be recommended without meeting the feasible and/or reasonableness criteria such as with gap closures.*

Cost considerations and whether a particular mitigation measure is recommended within the Draft EIR/EIS are in reference to NEPA 23 CFR 772 analysis only. Determining significance for noise impacts pursuant to CEQA is independent of the federal NEPA 23 CFR 772 analysis discussed in Section 3.2.7, Noise, which is centered on the detailed noise analysis of impacts according to the NAC. Also see Response to Comment GL14-305.

The metric used for the CEQA analysis is outlined in Chapter 4 of the Draft EIR/EIS. When determining whether a noise impact is significant under CEQA, noise analysis focuses on a comparison of the No Build Alternative noise level and the future build alternative noise level. The CEQA noise analysis involves looking at the setting of the noise impact and then how large or perceptible any noise increase would be to the given area. Key considerations include the uniqueness of the setting, the sensitive nature of the noise receptors, the magnitude of the noise increase, the number of residences affected, and the absolute noise level.

For this project, the threshold for significance under CEQA is an increase of 5 dB above the no-build traffic noise levels compared to the build alternative traffic noise levels. When the required mitigation measures of the NEPA 23 CFR 772 analysis were incorporated during the CEQA analysis, it was determined that for all areas of the project there would be a less than significant increase in the operational noise of the facility. Had there been an occurrence of a significant noise impact under CEQA, mitigation measures of the NEPA 23 CFR 772 analysis would then need to be amended to alleviate such impacts.

Soundwall S733 did not meet the reasonableness criteria; therefore, it was not recommended.

Comment GL14-308

The Draft EIR/EIS does not provide detailed construction noise analysis because the specific information required for such an analysis was not available at the environmental phase of the project. Once the final design is established and details of the construction activities become available, calculations will be conducted to determine any noise and vibration impacts from various construction phases and the application of appropriate mitigation measures. Text has been added to Section 3.2.7.4, Avoidance, Mitigation, and/or Minimization Measures, of the Final EIR/EIS to include NOI-4, which specifies provisions for the Noise and Vibration Construction Monitoring and Mitigation Plan. Detailed noise and vibration mitigation measures and monitoring procedures will be specified in the Noise and Vibration Construction Mitigation and Monitoring Plan. Noise and vibration measurements will be conducted during construction to confirm the effectiveness of the mitigation measures.

Comment GL14-309

With a project of this magnitude, there would be temporary unavoidable construction noise impacts for which mitigation measures would not reduce significant impacts to levels that would be less than significant (e.g., pile-driving). Noise levels of various construction activities will be calculated, and appropriate mitigation measures will be identified before the start of construction. Predicted noise levels and mitigation measures will be disclosed in advance in the Noise and Vibration Construction Monitoring and Mitigation Plan. The goal of construction noise mitigation measures will be to meet Caltrans construction noise conditions specified in Standard Specification Section 7_1.001.

Comment GL14-310

It is true that a 5-dB increase in noise level is considered a noticeable change in noise level. The statement from page 4-12 in the Draft EIR/EIS "(generally considered the minimum noise increase perceptible to the human ear)" has been removed. The statement in the Noise Study

Report correctly states that an increase of 3 dB is the typical level at which an increase in noise level is noticeable.

The Noise Element of the Seal Beach General Plan states that changes in noise levels less than 1-dB are not discernible and that an increase in noise level of 5 dB is clearly discernible. Furthermore, the Noise Element identifies that a 3-dB increase in noise level would be identified as a substantial increase. Results of numerous studies have shown that an increase in noise level of 3 dB is considered the minimum noise increase perceptible to the ear of the average human; therefore, the Noise Element identification that a 3-dB increase in noise level would be identified as a substantial increase is not accurate.

Comment GL14-311

CEQA requires compliance with one of the two situations presented in the CEQA checklist text, "standards established in the local general plan or noise ordinance, **[or]** applicable standards of other agencies." The latter section, which states, "applicable standards of other agencies," is in reference to the State and federal procedures that would be followed by Caltrans. Because the lead agency is at the State level and the project operates within State ROW, local standards and thresholds are not considered.

When the recommended abatement measures of NEPA 23 CFR 772 are incorporated into the project, there would be no significant impacts in accordance with the CEQA guidelines.

Please see Common Response – Noise/Noise Analysis.

Comment GL14-312

The tennis courts are protected by a 7-ft-high wall on top of a berm located on private property, which shields the otherwise direct exposure to freeway traffic noise. In accordance with Caltrans' Traffic Noise Analysis Protocol, an acoustically feasible soundwall must also be reasonable for it to be recommended. Soundwall S1162 was determined to be acoustically feasible for all of the build alternatives; however, S1162 was determined to be reasonable and recommended for Alternative 3 only. Therefore, Soundwall S1162 was not recommended for Alternatives 1 and 2.

Please also see Response to Comment GL14-307 for the procedure of soundwall analysis.

Comment GL14-313

Please see Responses to Comments GL14-303 and GL14-307 in regards to obligations under CEQA.

Please see Response to Comment GL14-312 for a discussion of Soundwall S1162.

Under Alternatives 1 and 3 (with the design option that avoids relocation), the existing 18-ft-high soundwall along Almond Avenue would remain as-is and untouched; therefore, recommended replacement in-kind soundwalls are not needed. However, under Alternatives 2 and 3 (without the design option that avoids relocation), sections of the existing soundwall would need to be removed, relocated, and replaced in-kind along the project alignment where space is needed for the proposed project's additional lanes and required safety features. Replacement in-kind Soundwalls S1116 and S1142 are required for Alternatives 2, and Soundwalls S1116 and S1132 are required for Alternative 3.

Comment GL14-314

Please see Common Response – Noise/Noise Analysis for noise policies and procedures.

The Noise Study Report provides details about requirements for the traffic noise impact analysis, shows the impact analysis results, and identifies feasible abatement measures. The NADR determines the reasonableness of the feasible traffic noise abatement measures presented in the Noise Study Report. Before a reasonableness determination can be made, feasibility – providing at least a 5-dB traffic noise reduction – must be achieved for at least one frequent outdoor use area. If a soundwall is acoustically feasible and reasonable, then it may be recommended. In the Draft EIR/EIS, Section 3.2.7, Noise, outlines the details of the recommended traffic noise abatement measures from the NADR and includes detailed information regarding soundwalls and their heights. Appendix N of the EIR/EIS includes figures that show the locations and heights of all recommended soundwalls.

The following is a list of the type of soundwalls analyzed in the Seal Beach area:

- New Soundwalls – S1162 for Alternative 3 only
- Modified Existing Soundwalls – None
- Forfeited Existing Soundwalls – None
- Replacement Soundwalls – S1116 and S1142 for Alternative 2 only
- Replacement Soundwalls – S1116 and S1132 for Alternative 3 only
- "Rejected" Soundwalls – S1162 for Alternatives 1 and 2

There are currently no plans to conduct traffic noise measurements after completion of the project.

Comment GL14-315

Under Alternatives 1 and 3 (with the design option that avoids relocation), the existing 18-ft-high soundwall along Almond Avenue would remain as-is and untouched; therefore, recommended Soundwalls S1116, S1132, and S1142 would no longer be required as replace in-kind soundwalls